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10/707,505	12/18/2003	Lennox E. Reid JR.	20.2896	1504
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SCHLUMBERGER OILFIELD SERVICES 200 GILLINGHAM LANE MD 200-9 SUGAR LAND, TX 77478			COLLINS, GIOVANNA M	
			ART UNIT	PAPER NUMBER
			3672	

DATE MAILED: 08/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No. 10/707,505	Applicant(s) REID ET AL.	
	Examiner Giovanna M. Collins	Art Unit 3672	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 June 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-26, 35-41 is/are pending in the application.
- 4a) Of the above claim(s) 7-10 on prior art is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-26 and 35-41 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 07 June 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>2/24/06, 6/7/06, 2/24/06</u> | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Election/Restrictions***

Applicant is reminded that claims 7-10 will not be examined on prior art as these claims are also directed to a nonelected species.

### ***Claim Objections***

1. Claim 13 is objected to because of the following informalities:

Claim 13 recites the limitation "the internal sleeve" in line 2. There is insufficient antecedent basis for this limitation in this claim, as this limitation has not been previously recited.

Appropriate correction is required

### ***Claim Rejections - 35 USC § 112***

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 7-10, 13 and 25 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not disclose how the petal retention members can

Art Unit: 3672

be used in combination with a piston, check valve or bladder as recited in claims 7-10, 13 and 25.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3,5,6,11-12,14-15, 17,19,20,23,24,26,35-39 and 41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cornelius 2,594,292 in view of Duperon 3807234.

Referring to claims 1, 14,15,17,19 , 20 and 35, Cornelius discloses (figs. 2 and 8) a sidewall coring tool, comprising: a tool body (16); a hollow coring shaft (163) extendable from the tool body; a formation cutter (166) disposed at a distal end of the hollow coring shaft, and a retention member (167). Cornelius does not disclose the retention member is elastic. Duperon teaches (fig. 5) an elastic retention member ( 9) with three petals (13) that are adjacent and have radial perforations (16) inside a petal circumference and overlap when the petals collapse where the petal are oriented relative to each other and forms a substantially contiguous surface ( at 10). Duperon teaches the retention member does not disturb the sample material (col. 1, lines 53-56). As it would be advantageous to avoid disturbing the sample material, it would be

Art Unit: 3672

obvious to one of ordinary skill in the art to modify the tool disclosed by Cornelius to have an elastic retention member with a plurality of petals where the petals are oriented relative to each other in view of the teachings of Duperon.

Referring to claims 2 and 38, Cornelius discloses internal sleeve (173,172) and a retention member (167) is connected to the internal sleeve.

Referring to claims 3 and 39, Cornelius discloses a retention member (167) is disposed proximate a distal end of the internal sleeve.

Referring to claims 5 and 41, Cornelius discloses a radial notch (at 170) in sleeve element (172).

Referring to claim 6, Cornelius discloses a retention member (167) has a petal circumference substantially the same as an inner diameter of the internal sleeve (at 172).

Referring to claim 11, Cornelius discloses an inner diameter (diameter at area around 172 in fig. 8) of the internal sleeve is substantially the same as an inner diameter of the cutter (166).

Referring to claim 12, Cornelius discloses an inner diameter (at area around element 169 in Fig. 8) of the internal sleeve is larger than an inner diameter of the cutter (166).

Referring to claim 23, Duperon teaches the retention member (9) is rounded and extrudes towards a proximal end of the hollow coring shaft.

Art Unit: 3672

Referring to claim 24, Cornelius discloses a method for taking a core sample comprising extending a coring bit (166) into a formation, the bit having a retention member (167); receiving the core sample in the coring bit and retaining the core sample in the coring bit with the retention member while withdrawing the coring bit from the formation (col. 9, lines 9-20). Cornelius does not disclose the retention member is elastic. Duperon teaches (fig. 5) an elastic retention member with a plurality of petals where the petals are oriented relative to each other. Duperon teaches the retention member does not disturb the sample material (col. 1, lines 53-56). As it would be advantageous to avoid disturbing the sample material, it would be obvious to one of ordinary skill in the art to modify the tool disclosed by Cornelius to have an elastic retention member with a plurality of petals where the petals are oriented relative to each other in view of the teachings of Duperon.

Referring to claim 26, Cornelius discloses the retention member (167) is connected to an internal sleeve (172,173) and the core sample is received in the internal sleeve.

Referring to claim 36, Duperon teaches each of the petals (13) includes at least one edge (at 12) that defines the petal.

Referring to claim 37, Duperon teaches one edge of a first petal abuts one edge (at 12) of a second plurality of petals.

6. Claims 1-3,5,6,11-12,14,16-18,21,23,24, and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cornelius 2,594,292 in view of Kinnear 2251679.

Art Unit: 3672

Referring to claims 1, 14, 16-18 and 21, Cornelius discloses (figs. 2 and 8) a sidewall coring tool, comprising: a tool body (16); a hollow coring shaft (163) extendable from the tool body; a formation cutter (166) disposed at a distal end of the hollow coring shaft, and a retention member (167). Cornelius does not disclose the retention member is elastic. Kinneer teaches (fig. 4) an elastic retention member (at 41) constructed of rubber (page3, col. 1, lines 1-12) with three petals (42) separated by gaps having circumferential perforations (at 43 where rivets are located) disposed outside a petal circumference where the petals are oriented relative to each other. Kinneer teaches the retention member improves retaining samples from soft formations (page 3, col. 1, lines 29-40). As it would be advantageous to improve retaining samples from soft formations, it would be obvious to one of ordinary skill in the art to modify the tool disclosed by Cornelius to have an elastic retention member with a plurality of petals where the petal are oriented relative to each other in view of the teachings of Kinneer.

Referring to claim 2, Cornelius discloses internal sleeve (173,172) and a retention member (167) is connected to the internal sleeve.

Referring to claim 3, Cornelius discloses a retention member (167) is disposed proximate a distal end of the internal sleeve.

Referring to claim 5, Cornelius discloses a radial notch (at 170) in sleeve element (172).



Referring to claim 6, Cornelius discloses a retention member (167) has a petal circumference substantially the same as an inner diameter of the internal sleeve ( at 172).

Referring to claim 11, Cornelius discloses an inner diameter (diameter at area around 172 in fig. 8) of the internal sleeve is substantially the same as an inner diameter of the cutter (166).

Referring to claim 12, Cornelius discloses an inner diameter (at area around element 169 in Fig. 8) of the internal sleeve is larger than an inner diameter of the cutter (166).

Referring to claim 23, Kinnear teaches the retention member (at 41) is rounded and extrudes towards a proximal end of the hollow coring shaft.

Referring to claim 24, Cornelius discloses a method for taking a core sample comprising extending a coring bit (166) into a formation, the bit having a retention member (167); receiving the core sample in the coring bit and retaining the core sample in the coring bit with the retention member while withdrawing the coring bit from the formation (col. 9, lines 9-20). Cornelius does not disclose the retention member is elastic. Kinnear teaches (fig. 4) an elastic retention member ( at 41) with a plurality of petals (42) where the petals are oriented relative to each other. Kinnear teaches the retention member improves retaining samples from soft formations (page 3, col. 1, lines 29-40). As it would be advantageous to improve retaining samples from soft formations, it would be obvious to one of ordinary skill in the art to modify the method disclosed by



Art Unit: 3672

Cornelius to have an elastic retention member with a plurality of petals where the petals are oriented relative to each other in view of the teachings of Kinnear.

Referring to claim 26, Cornelius discloses the retention member (167) is connected to an internal sleeve (172,173) and the core sample is received in the internal sleeve.

7. Claims 1,13,14,16-18 and 23-25 are under 35 U.S.C. 103(a) as being unpatentable over Zublin 2,571,644 in view of Kinnear.

Referring to claims 1, 14,16-18 and 21, Zublin discloses (figs. 7) a sidewall coring tool, comprising: a tool body (see fig. 1, at 16); a hollow coring shaft (24) extendable from the tool body; a formation cutter (47) disposed at a distal end of the hollow coring shaft, and a retention member (50) Zublin does not disclose the retention member is elastic. Kinnear teaches (fig. 4) an elastic retention member (at 41) constructed of rubber (page3, col. 1, lines 1-12) with three petals (42) separated by gaps having circumferential perforations (at 43 where rivets are located) disposed outside a petal circumference where the petals are oriented relative to each other. Kinnear teaches the retention member improves retaining samples from soft formations (page 3, col. 1, lines 29-40). As it would be advantageous to improve retaining samples from soft formations, it would be obvious to one of ordinary skill in the art to modify the tool disclosed by Cornelius to have an elastic retention member with a plurality of petals where the petals are oriented relative to each other in view of the teachings of Kinnear.

Referring to claim 13, Zublin discloses an internal sleeve (53) comprises a bladder (52).

Referring to claim 23, Kinnear teaches the retention member (at 41) is rounded and extrudes towards a proximal end of the hollow coring shaft.

Referring to claim 24, Zublin discloses a method for taking a core sample comprising extending a coring bit (47) into a formation, the bit having a retention member (50); receiving the core sample in the coring bit (Fig. 7) and retaining the core sample in the coring bit with the retention member while withdrawing the coring bit from the formation. Zublin does not disclose the retention member is elastic. Kinnear teaches (fig. 4) an elastic retention member (at 41) with a plurality of petals (42) where the petals are oriented relative to each other. Kinnear teaches the retention member improves retaining samples from soft formations (page 3, col. 1, lines 29-40). As it would be advantageous to improve retaining samples from soft formations, it would be obvious to one of ordinary skill in the art to modify the method disclosed by Cornelius to have an elastic retention member with a plurality of petals where the petals are oriented relative to each other in view of the teachings of Kinnear.

Referring to claim 25, Zublin discloses filling a bladder (52) with a fluid which will apply a radial pressure to the core sample.

8. Claims 1,13-15,17,19,20 ,23-25 are under 35 U.S.C. 103(a) as being unpatentable over Zublin 2,571,644 in view of Duperon 3807234.

Referring to claims 1 14,15,17,19 , 20 and 35, Zublin discloses (figs. 7) a sidewall coring tool, comprising: a tool body (see fig. 1, at 16); a hollow coring shaft (24) extendable from the tool body; a formation cutter (47) disposed at a distal end of the hollow coring shaft, and a retention member (50) Zublin does not disclose the retention member is elastic. Duperon teaches (fig. 5) an elastic retention member ( 9) with three petals (13) that are adjacent and have radial perforations (16) inside a petal circumference and overlap when the petals collapse where the petal are oriented relative to each other and forms a substantially contiguous surface ( at 10). Duperon teaches the retention member does not disturb the sample material (col. 1, lines 53-56). As it would be advantageous to avoid disturbing the sample material, it would be obvious to one of ordinary skill in the art to modify the tool disclosed by Zublin to have an elastic retention member with a plurality of petals where the petal are oriented relative to each other in view of the teachings of Duperon.

Referring to claim 13, Zublin discloses an internal sleeve (53) comprises a bladder (52).

Referring to claim 23, Duperon teaches the retention member (9) is rounded and extrudes towards a proximal end of the hollow coring shaft.

Referring to claim 24, Zublin discloses a method for taking a core sample comprising extending a coring bit (47) into a formation, the bit having a retention member (50); receiving the core sample in the coring bit (Fig. 7) and retaining the core sample in the coring bit with the retention member while withdrawing the coring bit from

Art Unit: 3672

the formation. Zublin does not disclose the retention member is elastic. Duperon teaches (fig. 5) an elastic retention member with a plurality of petals where the petals are oriented relative to each other. Duperon teaches the retention member does not disturb the sample material (col. 1, lines 53-56). As it would be advantageous to avoid disturbing the sample material, it would be obvious to one of ordinary skill in the art to modify the tool disclosed by Zublin to have an elastic retention member with a plurality of petals where the petals are oriented relative to each other in view of the teachings of Duperon.

Referring to claim 25, Zublin discloses filling a bladder (52) with a fluid which will apply a radial pressure to the core sample.

Referring to claim 36, Duperon teaches each of the petals (13) includes at least one edge (at 12) that defines the petal.

Referring to claim 37, Duperon teaches one edge of a first petal abuts one edge (at 12) of a second plurality of petals.

6. Claims 1, 14, 16-18 and 22 are under 35 U.S.C. 103(a) as being unpatentable over Linn 2,901,221 in view of Urbanosky 3,329,217.

Referring to claims 1, 14, and 16-18, Linn discloses (figs. 1-5) a sidewall coring tool, comprising: a tool body (15); a hollow coring shaft (23) extendable from the tool body; and an elastic retention member (38) with 3 petals (51) separated by gaps (when not biased see fig 4) that are adjacent when released (see fig. 5), having perforations

Art Unit: 3672

(45) outside a petal circumference Lin does not disclose a cutter. Urbanosky teaches a coring tool with a cutter to aid in cutting into the formation (col. 3, lines 1-5). As it would be advantageous to have a cutter to aid in cutting into the formation, it would be obvious to one of ordinary skill in the art at the time of the invention to modify the tool disclosed by Linn to have a formation cutter in view of the teachings of Urbanosky.

Referring to claim 22, Linn discloses the retention member (38) is rounded and extrudes towards a distal end of the hollow coring shaft.

10. Claims 4 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cornelius 2,594,292 in view of Duperon 3807234 as applied to claims 1 and 35 above, and further in view of Deely 2490512.

Cornelius, as modified, does not disclose the sleeve is non rotating. Deely teaches a coring tool with a non rotating internal sleeve. Deely teaches the nonrotating sleeve help to minimize disintegration of the core particularly in soft formations (col. 1, lines 18). As it would be advantageous to minimize disintegration of the core, it would be obvious to one of ordinary skill in the art at the time of the invention to further modify the tool disclosed by Cornelius, as modified by Duperon, to have a non rotating internal sleeve in view of the teachings of Deely.

### ***Response to Arguments***

7. Applicant's arguments filed 6/7/06 have been fully considered but they are not persuasive. Referring to the argument concerning the 112 rejection, the applicant argues that one of ordinary skill in the art should be able to combine the petal retention member with anyone of the piston, the check valve and the bladder. However, the specification does not describe how one of ordinary skill in the art would combine the petal retention with the piston, check valve and bladder. Therefore the argument is moot.

Applicant's arguments with respect to claims 1-6, 11-26, 35-41 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 3672

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Giovanna M. Collins whose telephone number is 571-272-7027. The examiner can normally be reached on 6:30-3 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on 571-272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
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